Title (en)

Wireless switch network architecture implementing layer 3 mobility domains

Title (de)

Drahtlose Schaltnetzarchitektur mit Schicht-3-mobilitätsbereichen

Title (fr)

Architecture de réseau de commutation sans fil mettant en oeuvre des domaines de mobilité de couche 3

Publication

EP 2041944 B1 20140122 (EN)

Application

EP 07799202 A 20070629

Priority

- US 2007072548 W 20070629
- US 48662906 A 20060714

Abstract (en)

[origin: WO2008008652A2] Techniques and technologies are provided in which wireless switches, each supporting their own subnet, are configured as part of a mobility domain. Each wireless switch in the mobility domain can discover other wireless switches in the mobility domain upon joining the network, and establish a peering session with each of the other switches within the mobility domain. This can involve establishing a data tunnel, which operates according to GRE-over-IP, and a control connection between each pair of the wireless switches in the mobility domain. Each data tunnel carries complete Layer-2 (L2) packets between the first wireless switch and the second wireless switch. Each L2 packet comprises L2 header information (e.g., a VLAN identifier), and is made available at the destination wireless switch of the data tunnel. Each control connection comprises a peering session over Internet Protocol (IP) which operates according to the transmission control protocol (TCP). Each control connection is configured to transfer wireless client device mobility related control plane information between the first wireless switch and the second wireless switch. This architecture can allow a wireless client device to retain its layer 3 (L3) address when the wireless client device roams between wireless switches (e.g., the first wireless switch and the second wireless switch) which are part of the first mobility domain. As such, the wireless client device can maintains network layer connectivity when it roams within the first mobility domain.

IPC 8 full level

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